

**FACT SHEET
FOR
STATE OF FLORIDA DOMESTIC WASTEWATER FACILITY PERMIT**

PERMIT NUMBER: FL0021369-009 (Major)

FACILITY NAME: City of Bradenton WWTF

FACILITY LOCATION: 1810 1st Street West, Bradenton, FL 34208
Manatee County

NAME OF PERMITTEE: City of Bradenton

PERMIT WRITER: Jacquelyn Champion

1. SUMMARY OF APPLICATION

a. Chronology of Application

Application Number: FL0021369-009-DW1P/NR

Application Submittal Date: July 25, 2014

b. Type of Facility

Domestic Wastewater Treatment Plant

Ownership Type: Municipal

SIC Code: 4952

c. Facility Capacity

Existing Permitted Capacity:	7.5 mgd Annual Average Daily Flow
Proposed Increase in Permitted Capacity:	1.5 mgd Annual Average Daily Flow
Proposed Total Permitted Capacity:	9.0 mgd Annual Average Daily Flow

d. Description of Wastewater Treatment

Operation of an existing 9.0 MGD annual average daily flow (AADF) daily flow type I activated sludge advanced wastewater treatment facility consisting of: headworks with bar screens; grit removal system; biofilter odor control system; two Carrousel-type aeration basins of 2.26 MG each, for a total of 4.52 MG; three clarifiers of 705,000 gallons each, for a total of 2.115 MG and 23,562 square feet total surface area; two below-grade filter lift stations; six single media gravity denitrification filters with air scour and water backwash providing a total of 3,000 square foot filtration surface area; one split compartment chlorine contact chamber of 500,000 gallons; one reclaimed storage basin of 280,000 gallons; and a de-chlorination chamber and post-aeration basin of 200,000 gallons. This plant is operated to provide secondary treatment and high level disinfection.

The biosolids handling stream consists of: one dissolved air flotation residuals thickening unit of 400 square feet total surface area; three aerobic digesters, two with capacities of 570,000 gallons each and one of 1,260,000 gallons, providing a total digestion volume of 2,400,000 gallons; and two mechanical belt filter presses.

The plant is a dual train facility with the exception of the headworks. Polymer coagulant feed is available on a standby status for solids control and methanol is directed to the denitrification filters for nitrate/nitrite control. Iron salts are added during secondary treatment for phosphorus control. The effluent and reclaimed water systems on-site and off are controlled, sequenced and operated according to procedures set forth in the plant Operating Protocol in order to assure maximum reliability and safeguards on the quality of the reclaimed water. Plant alarm systems are annunciated throughout the plant site and also are remoted to the plant.

e. Description of Effluent Disposal and Land Application Sites (as reported by applicant)

Monitoring Group D-001:

Class III Marine Waters, Manatee River, WBID 1848A

1) Pollutants which are present in significant quantities or which are subject to permit limitations are as follows:

Parameter	Units	Max/ Min	Reported Value	Statistical Basis
Flow	MGD	Max	4.7	Annual Avg
BOD, Carbonaceous 5 day, 20C	mg/L	Max	11.5	Daily Max
BOD, Carbonaceous 5 day, 20C	mg/L	Max	4.3	Weekly Avg
BOD, Carbonaceous 5 day, 20C	mg/L	Max	2.5	Monthly Avg
Solids, Total Suspended	mg/L	Max	7.6	Daily Max
Solids, Total Suspended	mg/L	Max	3.0	Weekly Avg
Solids, Total Suspended	mg/L	Max	1.85	Monthly Avg
Solids, Total Suspended (Influent)	mg/L	Max	9.0	Daily Max
Nitrogen, Total	mg/L	Max	22.1	Daily Max
Nitrogen, Total	mg/L	Max	19.3	Weekly Avg
Nitrogen, Total	mg/L	Max	11.64	Monthly Avg
Phosphorus, Total (as P)	mg/L	Max	12	Daily Max
Phosphorus, Total (as P)	mg/L	Max	1.8	Weekly Avg
Phosphorus, Total (as P)	mg/L	Max	0.93	Monthly Avg
pH	s.u.	Max	8.5	Daily Max
pH	s.u.	Min	6.6	Daily Min
Coliform, Fecal, % less than detection	percent	Max	48	Monthly Min
Coliform, Fecal	#/100mL	Max	12	Daily Max
Chlorine, Total Residual	mg/L	Max	0.1	Daily Max
Chlorine, Total Residual (Disinfection)	mg/L	Min	0.1	Daily Min
Oxygen, Dissolved (DO)	mg/L	Min	5.6	Daily Min
Enterococci	#/100mL	Max	55	Daily Max
Nickel, Total Recoverable	ug/L	Max	7.3	Daily Max
Nitrogen, Total	ton/mth	Max	3.9	Monthly Max
Nitrogen, Total	ton/yr	Max	14.8	Annual Max
Whole Effluent Toxicity	percent	Min	9	Daily Min

2) The following numeric exceedances of permit limitations occurred during the previous permit cycle:

Monitoring Date	Parameter Description	Reported Value	Limit	Statistical Basis	Units
5/31/2010	BOD, CARBONACEOUS 5 DAY, 20C	11.5	10	MAXIMUM	mg/L
11/30/2010	CHLORINE, TOTAL RESIDUAL	0.02	0.01	MAXIMUM	mg/L
7/31/2011	CHLORINE, TOTAL RESIDUAL	0.1	0.01	MAXIMUM	mg/L
8/31/2011	CHLORINE, TOTAL RESIDUAL	0.1	0.01	MAXIMUM	mg/L
10/31/2011	CHLORINE, TOTAL RESIDUAL	0.1	0.01	MAXIMUM	mg/L
11/30/2011	CHLORINE, TOTAL RESIDUAL	0.1	0.01	MAXIMUM	mg/L
11/30/2010	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.5	1	MINIMUM	mg/L
6/30/2011	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.8	1	MINIMUM	mg/L
7/31/2011	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.6	1	MINIMUM	mg/L
12/31/2011	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.6	1	MINIMUM	mg/L
3/31/2012	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.8	1	MINIMUM	mg/L

1/31/2013	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.1	1	MINIMUM	mg/L
5/31/2013	CHLORINE, TOTAL RESIDUAL (Disinfection)	0.5	1	MINIMUM	mg/L
5/31/2014	COLIFORM, FECAL	71	25	MAXIMUM	#/100mL
7/31/2011	COLIFORM, FECAL, % LESS THAN DETECTION	48	75	MINIMUM	%
11/30/2011	COLIFORM, FECAL, % LESS THAN DETECTION	67	75	MINIMUM	%
2/29/2012	COLIFORM, FECAL, % LESS THAN DETECTION	71	75	MINIMUM	%
8/31/2012	COLIFORM, FECAL, % LESS THAN DETECTION	72	75	MINIMUM	%
1/31/2013	COLIFORM, FECAL, % LESS THAN DETECTION	74	75	MINIMUM	%
6/30/2013	COLIFORM, FECAL, % LESS THAN DETECTION	65	75	MINIMUM	%
10/31/2013	COLIFORM, FECAL, % LESS THAN DETECTION	74	75	MINIMUM	%
4/30/2014	COLIFORM, FECAL, % LESS THAN DETECTION	72	75	MINIMUM	%
11/30/2014	COLIFORM, FECAL, % LESS THAN DETECTION	69	75	MINIMUM	%
11/30/2012	IC25 STATRE 7DAY CHR CERIODAPHNIA	<100	100	MINIMUM	%
4/30/2014	IC25 STATRE 7DAY CHR CERIODAPHNIA	<100	100	MINIMUM	%
5/31/2014	IC25 STATRE 7DAY CHR CERIODAPHNIA	<100	100	MINIMUM	%
5/31/2012	IC25 STATRE 7DAY CHR PIMEPHALES	9	100	MINIMUM	%
12/31/2012	IC25 STATRE 7DAY CHR PIMEPHALES	<100	100	MINIMUM	%
6/30/2011	NITROGEN, TOTAL	11.64	3.75	MO AVG	mg/L
6/30/2011	NITROGEN, TOTAL	19.3	4.5	WKLY AVG	mg/L
6/30/2011	NITROGEN, TOTAL	22.1	6	MAXIMUM	mg/L
7/31/2011	NITROGEN, TOTAL	5.89	3.75	MO AVG	mg/L
7/31/2011	NITROGEN, TOTAL	9.4	4.5	WKLY AVG	mg/L
7/31/2011	NITROGEN, TOTAL	14	6	MAXIMUM	mg/L
6/30/2012	NITROGEN, TOTAL	4.8	3.75	MO AVG	mg/L
6/30/2012	NITROGEN, TOTAL	6.3	4.5	WKLY AVG	mg/L
6/30/2012	NITROGEN, TOTAL	10.7	6	MAXIMUM	mg/L
6/30/2011	NITROGEN, TOTAL	3.1	3	ANNL AVG	mg/L
7/31/2011	NITROGEN, TOTAL	3.4	3	ANNL AVG	mg/L
8/31/2011	NITROGEN, TOTAL	3.5	3	ANNL AVG	mg/L
9/30/2011	NITROGEN, TOTAL	3.5	3	ANNL AVG	mg/L
10/31/2011	NITROGEN, TOTAL	3.5	3	ANNL AVG	mg/L
11/30/2011	NITROGEN, TOTAL	3.5	3	ANNL AVG	mg/L
12/31/2011	NITROGEN, TOTAL	3.5	3	ANNL AVG	mg/L
1/31/2012	NITROGEN, TOTAL	3.01	3	ANNL AVG	mg/L
6/30/2011	PHOSPHORUS, TOTAL (AS P)	1.8	1.5	WKLY AVG	mg/L
6/30/2011	PHOSPHORUS, TOTAL (AS P)	3.5	2	MAXIMUM	mg/L
9/30/2012	PHOSPHORUS, TOTAL (AS P)	12	2	MAXIMUM	mg/L
1/31/2013	PHOSPHORUS, TOTAL (AS P)	1.6	1.5	WKLY AVG	mg/L
1/31/2013	PHOSPHORUS, TOTAL (AS P)	2.5	2	MAXIMUM	mg/L
6/30/2011	SOLIDS, TOTAL SUSPENDED	9	5	MAXIMUM	mg/L

- a) The facility has identified the inability to chlorinate the denitrification sand filters without degrading the denitrification capability as the cause of several of the permit limit exceedances. During high flow conditions some solids may breakthrough resulting in positive fecal coliform samples. A correction action

implemented to address the permit limit exceedances is super-chlorination of filter effluent piping and contact chambers every 3 months or as needed.

Monitoring Group R-001 and R-002:

- 1) R-001 is an existing 1.5 MGD annual average daily flow (AADF) permitted capacity slow-rate public access reuse system consisting of an area that generally lies within the City of Bradenton limits east of Business 41 and US 301, north of 26th Avenue, extending into Manatee County to the Manatee River on the north, east of the Braden River and south to the vicinity of Evers Reservoir.
- 2) R-002 is an existing 6.0 MGD annual average daily flow permitted capacity slow-rate public access system consisting of a service area encompassing the Lakewood Ranch Development.

2. SUMMARY OF SURFACE WATER DISCHARGE

This facility does not have a new or expanded discharge to surface waters.

The Department does not anticipate adverse impacts on threatened or endangered species as a result of permit issuance.

Outfall D-001 discharges to the Class III Marine Waters of the Manatee River (WBID# 1848A). The verified impaired parameter for this WBID is mercury in fish tissue.

3. BASIS FOR PERMIT LIMITATIONS AND MONITORING REQUIREMENTS

This facility is authorized to discharge effluent from Outfall D-001 to the Manatee River based on the following:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow	MGD	Max	6.0	Annual Average	62-600.400(3)(b) FAC
Flow	MGD	Max	Report	Monthly Average	62-600.400(3)(b) FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	5.0	Annual Average	403.086(4)(a)1. FS & 62-600.740(1)(b)2.a. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	6.25	Monthly Average	62-600.740(1)(b)2.b. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	7.5	Weekly Average	62-600.740(1)(b)2.c. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	10.0	Single Sample	62-600.740(1)(b)2.d. FAC
Solids, Total Suspended	mg/L	Max	5.0	Annual Average	403.086(4)(a)2.FS & 62-600.740(1)(b)2.a. FAC
Solids, Total Suspended	mg/L	Max	6.25	Monthly Average	62-600.740(1)(b)2.b. FAC
Solids, Total Suspended	mg/L	Max	7.5	Weekly Average	62-600.740(1)(b)2.c. FAC
Solids, Total Suspended	mg/L	Max	10.0	Single Sample	62-600.740(1)(b)2.d. FAC
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	62-600.440(5)(f)3. FAC
Nitrogen, Total	mg/L	Max	3.0	Annual Average	403.086(4)(a)3. FS & 62-600.740(1)(b)2.a. FAC
Nitrogen, Total	mg/L	Max	3.75	Monthly Average	62-600.740(1)(b)2.b. FAC
Nitrogen, Total	mg/L	Max	4.5	Weekly Average	62-600.740(1)(b)2.c. FAC
Nitrogen, Total	mg/L	Max	6.0	Single Sample	62-600.740(1)(b)2.d. FAC
Phosphorus, Total (as P)	mg/L	Max	1.0	Annual Average	403.086(4)(a)4. FS & 62-600.740(1)(b)2.a. FAC
Phosphorus, Total (as P)	mg/L	Max	1.25	Monthly Average	62-600.740(1)(b)2.b. FAC
Phosphorus, Total (as P)	mg/L	Max	1.5	Weekly Average	62-600.740(1)(b)2.c. FAC
Phosphorus, Total (as P)	mg/L	Max	2.0	Single Sample	62-600.740(1)(b)2.d. FAC
pH	s.u.	Min	6.5	Single Sample	62-600.445 FAC
pH	s.u.	Max	8.5	Single Sample	62-600.445 FAC
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Total	62-600.440(5)(f)1. FAC
Coliform, Fecal	#/100mL	Max	25	Single Sample	62-600.440(5)(f)2. FAC

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Chlorine, Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	62-600.440(5)(b) FAC
Chlorine, Total Residual (For Dechlorination)	mg/L	Max	0.01	Single Sample	62-600.440(2) & 62-302.530(18) FAC
Oxygen, Dissolved (DO)	mg/L	Min	5.0	Single Sample	62-302.533 FAC
Enterococci	#/100mL	Max	35	Monthly Geometric Mean	40 CFR 131.41
Enterococci	#/100mL	Max	276	Single Sample	40 CFR 131.41
Nickel, Total Recoverable	ug/L	Max	8.3	Single Sample	62-302.530(45) FAC
Nitrogen, Total	ton/yr	Max	23.1	Annual Total	
Nitrogen, Total	ton/yr	Max	Report	Monthly Total	
Nitrogen, Total	ton/yr	Max	18.9	Annual Average	
Chronic Whole Effluent Toxicity, 7-Day IC25 (Ceriodaphnia dubia)	percent	Min	100	Single Sample	62-302.530(20) & (61) FAC and 62-4.241(1)(b) FAC
Chronic Whole Effluent Toxicity, 7-Day IC25 (Pimephales promelas)	percent	Min	100	Single Sample	62-302.530(20) & (61) FAC and 62-4.241(1)(b) FAC

FAC-Florida Administrative Code; FS-Florida Statute, CFR- Code of Federal Regulations

- a) Effluent limitations are based on Rule 62-302, F.A.C.-Class III Marine Standards, Rule 62-600, F.A.C. and 403.086, F.S.
- b) This facility has provided reasonable assurance that the discharge will not adversely affect the designated use of the receiving water. Fifth year inspection data, as well as all other available data, have been evaluated in accordance with the Department's reasonable assurance procedures to ensure that no limits other than those included in this permit are needed to maintain Florida water quality standards.
- c) The receiving water body for this facility is listed on the 303D list for mercury in fish tissue. A statewide total maximum daily load (TMDL) for mercury has been implemented for the state of Florida. This facility is required to develop a mercury minimization plan within 180 days of the effective permit date to address this mercury TMDL.
- d) This facility is required to conduct chronic toxicity testing for this discharge based on the continuous discharge from the Outfall. This facility reported intermittent test failures during the previous permit cycle.
- e) The previous permit dissolved oxygen (DO) limit of 5 mg/L remains in the renewed permit, as 5.0 mg/L will meet the minimum daily average saturation requirements of Rule 62-302.533(2), F.A.C., as illustrated in the *“Technical Support Document for the Derivation of Dissolved Oxygen Criteria to Protect Aquatic Life in Florida’s Fresh and Marine Waters”*.
- f) Total nitrogen loading limitations are based on the facility allocation in the Final Order Adopting Water Quality Based Effluent Limits (WQBEL) for Point Source Discharges to the Tampa Bay Watershed. The loading limits established by the WQBEL ensure compliance with the numeric nutrient criteria established for Tampa Bay in Rule 62-302.532, F.A.C.
- g) The permit requires sampling for total nitrogen and total phosphorus, with permit limits that are established by Florida Statute (403.086, F.S.) and Rule 62-600.740, F.A.C. Total nitrogen and total phosphorus concentration limits remain the same as in the previous permit. There is no increase in permitted surface water discharge capacity for this facility, therefore no increase in nutrient loading is anticipated. Based on the current waterbody impairment listings the receiving waters are achieving the numeric nutrient criteria.

This facility is authorized to direct reclaimed water to Reuse System R-001, a slow-rate public access system, based on the following:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow	MGD	Max	1.5	Annual Average	62-600.400(3)(b) & 62-610.810(5) FAC
Flow	MGD	Max	Report	Monthly Average	62-600.400(3)(b) & 62-610.810(5) FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	20.0	Annual Average	62-610.460 & 62-600.740(1)(b)1.a. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	45.0	Weekly Average	62-600.740(1)(b)1.c. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	60.0	Single Sample	62-600.740(1)(b)1.d. FAC
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	62-610.460(1) & 62-600.440(5)(f)3. FAC
pH	s.u.	Min	6.0	Single Sample	62-600.445 FAC
pH	s.u.	Max	8.5	Single Sample	62-600.445 FAC
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Total	62-600.440(5)(f)1. FAC
Coliform, Fecal	#/100mL	Max	25	Single Sample	62-610.460 & 62-600.440(5)(f)2. FAC
Chlorine, Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	62-600.440(5)(b), 62-610.460(2), & 62-610.463(2) FAC
Turbidity	NTU	Max	Report	Single Sample	62-610.463(2) FAC
Giardia	cysts/100L	Max	Report	Single Sample	62-610.463(4) FAC
Cryptosporidium	oocysts/100L	Max	Report	Single Sample	62-610.463(4) FAC

FAC-Florida Administrative Code

This facility is authorized to direct reclaimed water to Reuse System R-002, a slow-rate public access system, based on the following:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow	MGD	Max	6.0	Annual Average	62-600.400(3)(b) & 62-610.810(5) FAC
Flow	MGD	Max	Report	Monthly Average	62-600.400(3)(b) & 62-610.810(5) FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	20.0	Annual Average	62-610.460 & 62-600.740(1)(b)1.a. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	30.0	Monthly Average	62-600.740(1)(b)1.b. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	45.0	Weekly Average	62-600.740(1)(b)1.c. FAC
BOD, Carbonaceous 5 day, 20C	mg/L	Max	60.0	Single Sample	62-600.740(1)(b)1.d. FAC
Solids, Total Suspended	mg/L	Max	5.0	Single Sample	62-610.460(1) & 62-600.440(5)(f)3. FAC
pH	s.u.	Min	6.0	Single Sample	62-600.445 FAC
pH	s.u.	Max	8.5	Single Sample	62-600.445 FAC
Coliform, Fecal, % less than detection	percent	Min	75	Monthly Total	62-600.440(5)(f)1. FAC
Coliform, Fecal	#/100mL	Max	25	Single Sample	62-610.460 & 62-600.440(5)(f)2. FAC
Chlorine, Total Residual (For Disinfection)	mg/L	Min	1.0	Single Sample	62-600.440(5)(b), 62-610.460(2), & 62-610.463(2) FAC
Turbidity	NTU	Max	Report	Single Sample	62-610.463(2) FAC
Giardia	cysts/100L	Max	Report	Single Sample	62-610.463(4) FAC
Cryptosporidium	oocysts/100L	Max	Report	Single Sample	62-610.463(4) FAC

FAC-Florida Administrative Code

Other Limitations and Monitoring Requirements:

Parameter	Units	Max/ Min	Limit	Statistical Basis	Rationale
Flow	MGD	Max	9.0	Annual Average	62-600.400(3)(b) FAC
Flow	MGD	Max	Report	3-Month Rolling Average	62-600.400(3)(b) FAC
Flow	MGD	Max	Report	Monthly Average	62-600.400(3)(b) FAC
Percent Capacity, (TMADF/Permitted Capacity) x 100	percent	Max	Report	Monthly Average	62-600.405(4) FAC
BOD, Carbonaceous 5 day, 20C (Influent)	mg/L	Max	Report	Monthly Average	62-601.300(1) FAC
Solids, Total Suspended (Influent)	mg/L	Max	Report	Monthly Average	62-601.300(1) FAC
Monitoring Frequencies and Sample Types	-	-	-	All Parameters	62-601 FAC and/or BPJ of permit writer
Sampling Locations	-	-	-	All Parameters	62-601, 62-610.412, 62-610.463(1), 62- 610.568, 62-610.613 FAC and/or BPJ of permit writer

FAC-Florida Administrative Code; BPJ-Best Professional Judgement

4. DISCUSSION OF CHANGES TO PERMIT LIMITATIONS

- a) The current wastewater permit for this facility FL0021369 expired on January 28, 2015.
- b) The permitted capacity of this facility has been increased from 7.5 mgd to 9.0 mgd to reflect the plant design capacity of 9.0 mgd. The permitted discharge flow to D-001 remains 6.0 mgd annual average daily flow.
- c) The parameters cyanide, lead, copper and nickel were monitored during the previous permit cycle based on sampling results that indicated the presence of these metals in the effluent. An analysis of the data collected during the last five year permit cycle supported removal of continued monitoring for cyanide, copper and lead. Cyanide was consistently reported as below the approved method detection limit for all sampling events with the exception of one sample in April 2011. Copper and lead were detected at concentrations below the Class II Marine water quality standard in Rule 62-302.503, F.A.C., consistently. The data were entered into the reasonable assurance verification workbook which supported removal of these monitoring parameters. Nickel will continued to be monitored but the frequency of analysis is reduced to quarterly.
- d) The ambient monitoring sampling requirements were reduced to a semi-annual sampling during all years of the permit with sample collection dependent on discharges occurring from D-001.
- e) The permittee indicated on the permit renewal application that the facility will only produce Class B biosolids. Thus, Class A and Class AA requirements were removed from this permit.
- f) The frequency of analysis for monitoring of Class B biosolids was increased from quarterly to bi-monthly based on the dry tons of biosolids generated and reported in the application of 1,328 tons/year. The minimum frequency of monitoring for 800 to 8,000 dry tons generated is once per 60 days, Rule 62-640.650(3)(a)4.c, F.A.C.
- g) The parameters total recoverable cadmium, total recoverable lead and total recoverable chromium were removed from the groundwater monitoring requirements. These parameters were typically below detection limits in the compliance wells and were not found to be at concentrations that would warrant groundwater monitoring in the application expanded effluent analysis.
- h) The parameter arsenic was removed from the groundwater monitoring requirements. Arsenic detections in the compliance wells were comparable to the concentrations in the background well. Additionally, arsenic concentrations reported in the expanded effluent analysis were lower than arsenic detections in the compliances wells, indicating that the reuse effluent is not the source of arsenic in the groundwater.

5. BIOSOLIDS MANAGEMENT REQUIREMENTS

Biosolids generated by this facility may be land applied or disposed of in a Class I solid waste landfill.

See the table below for the rationale for the Class B biosolids limits and monitoring requirements.

Parameter	Units	Max /Min	Limit	Statistical Basis	Rationale
Coliform, Fecal	MPN/g	Max	2,000,000	Single Sample	62-640 FAC
Nitrogen, Sludge, Tot, Dry Wt (as N)	percent	Max	Report	Single Sample	62-640.650(3)(a)3. FAC
Phosphorus, Sludge, Tot, Dry Wt (as P)	percent	Max	Report	Single Sample	62-640.650(3)(a)3. FAC
Potassium, Sludge, Tot, Dry Wt (as K)	percent	Max	Report	Single Sample	62-640.650(3)(a)3. FAC
Arsenic Total, Dry Weight, Sludge	mg/kg	Max	75.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Cadmium, Sludge, Tot, Dry Weight (as Cd)	mg/kg	Max	85.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Copper, Sludge, Tot, Dry Wt. (as Cu)	mg/kg	Max	4,300.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Lead, Dry Weight, Sludge	mg/kg	Max	840.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Mercury, Dry Weight, Sludge	mg/kg	Max	57.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Molybdenum, Dry Weight, Sludge	mg/kg	Max	75.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Nickel, Dry Weight, Sludge	mg/kg	Max	420.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Selenium Sludge Solid	mg/kg	Max	100.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
Zinc, Dry Weight, Sludge	mg/kg	Max	7,500.0	Single Sample	62-640.650(3)(a)3. & 700(5)(a) FAC
pH	s.u.	Max	Report	Single Sample	62-640.650(3)(a)3. FAC
Solids, Total, Sludge, Percent	percent	Max	Report	Single Sample	62-640.650(3)(a)3. FAC
Monitoring Frequency		All Parameters			62-640.650(3)(a)4. FAC
Pathogen and vector attraction reduction monitoring		All Parameters			62-640.600 & 650(3)(a)1. FAC

FAC-Florida Administrative Code

See the table below for the rationale for the biosolids quantities monitoring requirements.

Parameter	Units	Max/Min	Limit	Statistical Basis	Rationale
Biosolids Quantity (Landfilled)	dry tons	Max	Report	Monthly Total	62-640.650(5)(a)1. FAC
Biosolids Quantity (Land-Applied)	dry tons	Max	Report	Monthly Total	62-640.650(5)(a)1. FAC
Monitoring Frequency		All Parameters			62-640.650(5)(a) FAC

FAC-Florida Administrative Code

6. GROUND WATER MONITORING REQUIREMENTS

Ground water monitoring requirements have been established in accordance with Chapters 62-520, 532, 601, 610, and 620, F.A.C.

7. PERMIT SCHEDULES

The schedule in the wastewater permit includes the requirements for permit renewal and the development of a mercury minimization plan.

8. INDUSTRIAL PRETREATMENT REQUIREMENTS

At this time, the facility is not required to develop an approved industrial pretreatment program. However, the Department reserves the right to require an approved program if future conditions warrant.

9. ADMINISTRATIVE ORDERS (AO) AND CONSENT ORDERS (CO)

This permit is not accompanied by an AO and this facility has not entered into a CO with the Department.

10. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

No variances were requested for this facility.

11. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in item 14. Copies will be provided at a minimal charge per page.

12. CHANGES FROM THE NOTICE OF DRAFT TO THE NOTICE PERMIT ISSUANCE

The facility provided data that demonstrate the effluent does not contain quantifiable mercury levels, therefore in accordance with Rule 62-304.900(1), the requirement to develop a Mercury Minimization plan was removed per the request of the facility.

The schedule item requiring a study specific to the use of MWB-02 as a background well has been removed from the permit. The facility provided sufficient information to support the continuation of using MWB-02 as a background well.

A description of facility modifications scheduled for completion during this permit cycle was added to the Wastewater Treatment description in the permit.

The total nitrogen loading allocation was corrected to 19.2 ton/year, five year rolling average, for consistency with the Final Order Adopting Water Quality Based Effluent Limits (WQBEL) for Point Source Discharges to the Tampa Bay Watershed.

Minor typographical errors and formatting errors were corrected.

13. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Draft Permit and Public Notice to Applicant and EPA	April 3, 2015
Public Comment Period	Beginning: April 19, 2015 Ending: May 19, 2015
Notice of Permit Issuance	May 2015

14. DEP CONTACT

Additional information concerning the permit and proposed schedule for permit issuance may be obtained during normal business hours from:

Jacquelyn Champion
Environmental Manager
Southwest District Office
13051 N. Telecom Pkwy
Temple Terrace, FL 33637-0926
Telephone No.: (813) 470-5918
jacquelyn.champion@dep.state.fl.us